

Remarks

Applicant has amended claims 11, 13, 15-18, and 27, cancelled claim 14, and added new claim 29. Claims 1-3, 9, 11-13, 15-18, 27 and 29 are now pending.

Rejection under 35 USC §112, first paragraph:

Claims 11 and 12 were rejected under 35 USC §112, first paragraph, for lack of enablement. Applicant traverses this basis of rejection. Examiner alleges that the specification does not enable the treatment of all proliferative diseases. Claim 11 has been amended so as to limit the claimed process to the treatment of ovarian and epidermoid cancers of a type responsive to one or more of the compounds of claims 1-3, 9, 13, 15-18, 27 and 29. Applicant's amendment to claim 11 obviates this basis of rejection both with respect to Claims 11 and 12.

Rejection under 35 USC §112, second paragraph:

Claims 13-18 and 27 were rejected under 35 USC §112, second paragraph, for vagueness. Applicant traverses this basis of rejection. However, Applicant's amendments to Claims 13, 15-18 and 27 obviate this basis of rejection.

Double Patenting:

Claims 1-3, 9, 11-14, and 27 are provisionally rejected over claims 1-4 and 9 of copending Application No. 10/732,698 and over claims 11-18 and 21 of copending Application No. 10/227,073. Enclosed herewith are Terminal Disclaimers with respect to each of these two copending references.

Claims 11-14 are provisionally rejected as obvious over claims 1, 4, 6-8 and 12-17 of US Patent No. 6,531,497. Enclosed herewith is a Terminal Disclaimer with respect to this issued patent.

Rejection under 35 USC §102(b):

Claims 11-14 were rejected under 35 USC §102(b) as anticipated by Nicolaou (WO99/67252). Applicant traverses this basis of rejection. However, Applicant's cancellation of claim 14 obviates this basis of rejection.

Rejection under 35 USC §103(a):

Claims 1-3, 9, 11-14 and 27 were rejected under 35 USC §103(a) as obvious over Vite (WO99/54318), Nicolaou (WO99/67252), and/or Klimko (WO2003/026744). Applicant traverses this basis of rejection.

Vite (WO99/54318) discloses a synthetic procedure whereby epothilones A and B are deoxygenated at the epoxide ring (WCl_6 , $n\text{-BuLi}$) and then cyclopropanated under mild conditions. This deoxygenation process occurs with retention of the epoxide geometry. If the epoxide was *cis*, then the double bond will be *cis* and if the epoxide was *trans*, then the newly formed double bond will be *trans*. This methodology is very limited in scope as the starting materials are the natural products or epothilones containing an epoxide or having only a 12,13-unsaturation. One could not make the instantly claimed compounds using this methodology. The suggestion of Vite (WO99/54318) is limited by the limitations of its disclosed methodology. More particularly, Vite (WO99/54318) discloses how to derivatize the naturally occurring R_8 group but does not disclose how to introduce new groups into this position. Because of these limitations, Vite (WO99/54318) neither discloses nor suggests any of the compounds of claims 1-3, 9, 13-14 and 27 of the present application. Accordingly, claims 1-3, 9, 11-14 and 27 of the present application are patentably unobvious over Vite (WO99/54318) and are patentably unobvious over Vite (WO99/54318) in combination with either Nicolaou (WO99/67252), and/or Klimko (WO2003/026744).

Although Nicolaou (WO99/67252) discloses the compound of Claim 14 (now

cancelled), Nicolaou (WO99/67252) does not disclose or suggest the advantageous activity of this particular compound and does not disclose or suggest structural elements of sulfur containing tails employable for making analogs for the compound of Claim 14. Accordingly, there is no suggestion to make analogs of the compound of Claim 14. Claims 1-3, 9, 13-14 and 27 of the present application are patentably unobvious over Nicolaou (WO99/67252) because of this lack of suggestion.

Klimko (WO2003/026744) discloses a method for treating ophthalmic conditions using prior art epothilones, including, *inter alia*, the epothilones of Vita. No new epothilones are disclosed by Klimko. Applicant's comments regarding Vite (WO99/54318), Nicolaou (WO99/67252) and also applicable to Klimko (WO2003/026744). Claims 1-3, 9, 13-14 and 27 of the present application are patentably unobvious over Klimko (WO2003/026744).

Summary:

Claims 11 and 12 have been amended so as to conform with the scope of enablement provided by the specification. Claims 13-18 and 27 are patentably clear due to Applicant's amendments to Claims 13, 15-18 and 27. Terminal Disclaimers have been filed with respect to the double patenting rejection of Claims 1-3, 9, 11-14, and 27 over claims 1-4 and 9 of copending Application No. 10/732,698 and over claims 11-18 and 21 of copending Application No. 10/227,073. A further Terminal Disclaimer has been filed with respect to the double patenting rejection of claims 11-14 over claims 1, 4, 6-8 and 12-17 of US Patent No. 6,531,497. Claims 11-13 are unanticipated by Nicolaou (WO99/67252) because of the cancellation of Claim 14,. Claims 1-3, 9, 11-13 and 27 are patentably unobvious over Vite (WO99/54318), Nicolaou (WO99/67252), and/or Klimko (WO2003/026744).

A notice of allowance with respect to Claims 1-3, 9, 11-13, 15-18, 27 and 29 is requested.

Respectfully submitted,

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